Saturn's rings

To discuss ...

- What are Saturn's rings made of ..?
 - -- Chunks of ice. (Some rocks and dust, too, but mostly ice.) Some chunks are very small, some are as big as a house.

(Scientists are now finding lots of water in outer space – frozen as ice. For instance, many comets are full of ice, like giant snowballs.)

What caused the rings to form..?

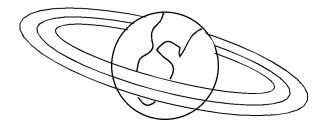
No one knows for sure, but scientists have some theories:

- -- The rings could be the pieces of a moon that broke apart.
- -- The rings could be the remains of a shattered comet that was captured by Saturn's gravity.

(The spacecraft that's now in orbit around Saturn, called "Cassini," arrived there in July, 2004, after a journey of seven years. Saturn is almost a billion miles away.)

To do ...

• Draw a simple picture of the "Earth with rings" on the blackboard.



- What if the Earth had rings..? How do you think things might be different..?
 - -- How would the sky look, especially at night..?
 - -- How might it effect the weather..? (The rings cast a giant shadow.)
 - -- Could they create any problems for satellites..? The Space Station..?